

1 **CLAIMS**

2 1. A method for delivering software via a network comprising:  
3 describing one or more software extensions using descriptions, the  
4 extensions being configured for incorporation in a software platform executing on  
5 a client; and

6 delivering the descriptions of the one or more extensions to the client via  
7 the network, the descriptions being configured for use in downloading the  
8 software extensions via the network.

9  
10 2. The method of claim 1, wherein the network comprises the Internet.

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12 3. The method of claim 1, wherein the descriptions comprise a tag-  
13 based, hierarchical language.

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15 4. The method of claim 1, wherein the descriptions comprise XML  
16 descriptions.

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18 5. The method of claim 1, wherein:  
19 the network comprises the Internet; and  
20 descriptions comprise XML descriptions.  
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1        6. The method of claim 1, wherein the software extensions are  
2 configured to make context-based changes in the operation of the software  
3 platform, the context-based changes being associated with the computing context  
4 of a user.

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6        7. The method of claim 1, wherein the software platform is configured  
7 to provide a single application program having multiple different functionalities  
8 that can enable a user to accomplish multiple different tasks.

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10       8. The method of claim 7, wherein the software extensions are  
11 configured to make context-based changes in the operation of one or more of the  
12 multiple different functionalities that change the manner in which a user can  
13 accomplish a task associated with a particular functionality.

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15       9. The method of claim 1, wherein the software extensions provide user  
16 interface elements.

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18       10. The method of claim 1, wherein the software extensions provide  
19 behaviors, components, or objects.

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21       11. The method of claim 1, wherein the software extensions provide  
22 store elements.

1       **12.**    The method of claim 1, wherein the software extensions provide  
2 user-defined elements.

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4       **13.**    The method of claim 1, wherein the software extensions provide one  
5 or more of the following:

6       user interface elements;

7       behaviors, components, or objects;

8       store elements; and

9       user-defined elements.

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11       **14.**    The method of claim 1, wherein at least one extension provides an  
12 ability to add new points of extensibility.

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14       **15.**    The method of claim 1, wherein the describing of the one or more  
15 software extensions comprises describing the extensions using an extension  
16 description file (EDF) comprising an XML file that describes a logical attachment  
17 to the software platform.

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19       **16.**    The method of claim 1, wherein one or more of the descriptions  
20 contains an implementation of all or part of the functionality of an extension.  
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17. One or more computer-readable media having computer-readable instructions thereon which, when executed by a computer system, cause the computer system to:

describe one or more software extensions using extensible markup language (XML), the extensions being configured for incorporation in a software platform comprising a single application program, the single application program having multiple different functionalities that can enable a user to accomplish multiple different tasks; and

deliver XML descriptions of the one or more extensions to the client via the Internet, the descriptions being configured for use in downloading the software extensions via the Internet.

18. A method for delivering software via a network comprising:

describing one or more software extensions using one or more descriptive files, the extensions being configured for incorporation in a software program executing on a client;

associating the one or more descriptive files with one or more associated extension files that are useable to provide a program functionality;

storing the descriptive files and associated extension files in a network-accessible location; and

delivering the descriptive files and the associated extension files of the one or more extensions to the client via a network.

1       **19.**   The method of claim 18, wherein said describing comprises  
2 describing individual software extensions with at least one XML file, including a  
3 description of a logical attachment to the software program, and a description of  
4 one or more physical files and/or resources that are used in a software extension.

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6       **20.**   The method of claim 18, wherein the software extensions are  
7 configured to make context-based changes in the operation of the software  
8 application, the context-based changes being associated with the computing  
9 context of a user.

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11       **21.**   The method of claim 18, wherein the software program comprises  
12 multiple different functionalities that can enable a user to accomplish multiple  
13 different tasks, the one or more software extensions being configured to make  
14 context-based changes in the operation of one or more of the different  
15 functionalities that change the manner in which a user can accomplish a task  
16 associated with a particular functionality.

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18       **22.**   The method of claim 21, wherein the software program comprises a  
19 single navigable window that can be navigated by a user between the different  
20 functionalities.

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22       **23.**   The method of claim 18, wherein the one or more software  
23 extensions provide user interface elements.  
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24. The method of claim 18, wherein the one or more software extensions provide behaviors, components, or objects.

25. The method of claim 18, wherein the one or more software extensions provide store elements.

26. The method of claim 18, wherein the one or more software extensions provide user-defined elements.

27. The method of claim 18, wherein the one or more software extensions provide one or more of the following:  
user interface elements;  
behaviors, components, or objects;  
store elements; and  
user-defined elements.

28. One or more computer-readable media having computer-readable instructions thereon which, when executed by a computer, implement the method of claim 18.

29. A method of delivering software via a network comprising:  
storing one or more extension definition files (EDFs) that describe a logical attachment to a software application program;  
storing one or more extension files that correspond to the one or more EDFs and extend the software application program; and

1 delivering, via a network, at least one EDF to a client; and  
2 delivering, via a network, at least one extension file that corresponds to the  
3 at least one EDF to a client.

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5 30. The method of claim 29, wherein the EDFs are defined in a  
6 hierarchical language.

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8 31. The method of claim 29, wherein the network comprises the  
9 Internet.

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11 32. The method of claim 29, wherein said acts of storing are  
12 accomplished by hosting said files with an Internet server.

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14 33. The method of claim 29, wherein the EDFs comprise XML files.

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16 34. The method of claim 33, wherein the XML files comprise  
17 predefined tags that are associated with feature types that are to be added to the  
18 application program.

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20 35. The method of claim 34, wherein one or more of the predefined tags  
21 correspond to user interface elements.

22  
23 36. The method of claim 34, wherein one or more of the predefined tags  
24 correspond to services which can be behaviors, components, or objects.  
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1        37.    The method of claim 34, wherein one or more of the predefined tags  
2 correspond to store elements.

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4        38.    The method of claim 34, wherein the XML files comprise user-  
5 defined tags that are associated with user-defined features that are to be added to  
6 the application program.

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8        39.    One or more computer-readable media having computer-readable  
9 instructions thereon which, when executed by a computer, implement the method  
10 of claim 29.

11  
12       40.    A data structure embodied on a computer-readable medium  
13 comprising:

14       a first sub-structure indicative of a software extension that is to be  
15 incorporated in a software application program;

16       one or more second sub-structures associated with the first sub-structure  
17 and indicative of feature types that can be added by the extension to the  
18 application program; and

19       one or more third sub-structures associated with the one or more second  
20 sub-structures and indicative of features of an associated feature type that can be  
21 added by the extension.

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23       41.    The data structure of claim 40, wherein the one or more second sub-  
24 structures are children of the first sub-structures.



1       **42.**     The data structure of claim 40, wherein the one or more third sub-  
2 structures are children of the one or more second sub-structures.

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4       **43.**     The data structure of claim 40, wherein the one or more second sub-  
5 structures are children of the first sub-structures, and the one or more third sub-  
6 structures are children of the one or more second sub-structures.

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8       **44.**     The data structure of claim 40, wherein the sub-structures comprise  
9 XML tags.

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11       **45.**     The data structure of claim 40, wherein the feature types comprise  
12 one or more of the following feature types:

13       user interface elements;

14       behaviors, components, or objects;

15       store elements; and

16       user-defined elements.

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18       **46.**     The data structure of claim 40, wherein the data structure comprises  
19 an open XML schema that can be extended.

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21       **47.**     The data structure of claim 40, wherein the data structure comprises  
22 an open XML schema that can be extended by third parties.  
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1       **48.**     A method of delivering software via a network comprising:  
2       navigating to a network site that maintains at least one software application  
3       program; and

4       downloading a software application program from the network site, the  
5       application program comprising multiple different functionalities that can assist a  
6       user in accomplishing different tasks, the software application program being  
7       configured to be extended with software extensions that are deliverable via a  
8       network and are described by at least one network-deliverable file.

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10       **49.**     The method of claim 48, wherein the application program comprises  
11     a single navigable window that can be navigated by a user between the multiple  
12     different functionalities.

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14       **50.**     The method of claim 48 further comprising extending the software  
15     application program by adding at least one extension to the application program.

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17       **51.**     The method of claim 50, wherein said extending comprises:  
18     using a link to navigate to a different network site that hosts one or more  
19     XML files that describe the extension, and extension files that are used to  
20     implement the extension; and  
21     downloading the one or more XML files and the extension files to a client.

1           **52.**     The method of claim 51, wherein one of the XML files comprises a  
2 file that logically describes an extension, and one of the XML files comprises a  
3 file that describes the extension files.

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5           **53.**     The method of claim 51, wherein the link is stored in a user  
6 preference.

7  
8           **54.**     One or more computer-readable media having computer-readable  
9 instructions thereon which, when executed by a computer, cause the computer to:

10           navigate to a network site that maintains at least one software application  
11 program;

12           download a software application program comprising multiple different  
13 functionalities that can assist a user in accomplishing different tasks, the software  
14 application program being configured to be extended with software extensions that  
15 are deliverable via the network and described by at least one network-deliverable  
16 file; and

17           extend the software application program by adding at least one extension to  
18 the application program, the extension being added by using a link to navigate to a  
19 different network site that hosts one or more files that describe the extension, and  
20 extension files that are used to implement the extension and downloading the one  
21 or more files and the extension files to a client.

22  
23           **55.**     A method of delivering software via a network comprising:  
24           accessing a Web site through which one or more software extensions can be  
25 obtained;

1 receiving at least one file that describes at least one software extension  
2 using a hierarchical language that describes the software extension's logical  
3 attachment to a software application program;

4 receiving one or more software extension files; and

5 installing the one or more software extension files based, at least in part, on  
6 the description contained in said at least one file.

7  
8 **56.** The method of claim 55, wherein the hierarchical language that  
9 describes the software extension's logical attachment comprises a tag-based  
10 language.

11  
12 **57.** The method of claim 55, wherein the hierarchical language that  
13 describes the software extension's logical attachment comprises extensible markup  
14 language (XML).

15  
16 **58.** The method of claim 55, wherein said installing comprises doing so  
17 without manipulating a client registry or any registry keys that are permanently  
18 persisted on the client machine.

19  
20 **59.** The method of claim 55, further comprising determining whether an  
21 update to a software extension is available and, if so, receiving update extension  
22 files.

1        60.    The method of claim 59, wherein said determining comprises  
2 polling an extension catalog.

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4        61.    The method of claim 59, wherein said determining comprises  
5 polling an extension catalog comprising an XML file.

6  
7        62.    One or more computer-readable media having computer-readable  
8 instructions thereon which, when executed by a computer, cause the computer to  
9 implement the method of claim 55.

10  
11       63.    A method of providing software for delivery over a network  
12 comprising:

13       describing one or more software extensions using one or more extensible  
14 markup language (XML) files, the extensions being configured for incorporation  
15 in a software program executing on a client;

16       associating the one or more XML files with one or more associated  
17 extension files that are useable to provide a program functionality; and

18       storing the XML files and associated extension files in a network-accessible  
19 location.

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21       64.    A network site through which a client can access software files  
22 comprising:

23       one or more software extension files configured to be incorporated into a  
24 software application program and delivered via a network; and  
25

1 one or more files associated with the one or more software extension files  
2 and describing the extension files, the one or more files describing a logical  
3 attachment of the one or more software extension files to the software application  
4 program.

5  
6 65. The network site of claim 64, wherein the hierarchical language  
7 comprises extensible markup language (XML).

8  
9 66. A method of managing network-based software extensions  
10 comprising:

11 grouping multiple software extension descriptions in a catalog in a  
12 network-accessible location;

13 accessing the network-accessible location; and

14 using the catalog to update a software extension that is resident on a  
15 computing device.

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17 67. The method of claim 66 further comprising querying the catalog to  
18 ascertain an extension description.

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20 68. The method of claim 66 further comprising querying the catalog  
21 based on a user's personal setting.

22  
23 69. The method of claim 66, wherein the extension descriptions are  
24 defined in XML.